

CLAIMS

What is claimed is:

1. A system for modifying the location at which bodily fluids interact with nutrients in a gastrointestinal tract, comprising:  
  
a conduit having a first end and a second end, said first end configured to divert bodily fluids from an entrance within a gastrointestinal tract to a location downstream from said entrance; and  
  
means for attaching said second end to said entrance.
2. The system of claim 1 wherein said conduit comprises a flexible tube having a tube length.
3. The system of claim 2 wherein said tube length is adjustable.
4. The system of claim 1 wherein said conduit is delivered into a patient through the gastrointestinal tract.
5. The system of claim 1 wherein said conduit and said means for attaching are made of an absorbable material.
6. The system of claim 1 wherein said conduit further comprises a plurality of apertures.
7. The system of claim 1 wherein said entrance is the Ampula of Vater.
8. The system of claim 7 wherein said bodily fluids comprise a bile secretion.
9. The system of claim 7 wherein said bodily fluids comprise a pancreatic secretion.
10. The system of claim 7 wherein said entrance further comprises at least one duct.
11. The system of claim 1 wherein said means for attaching comprises a cap.
12. The system of claim 11 wherein said cap is removably affixed to said entrance.

13. The system of claim 11 wherein said cap is permanently affixed to said entrance.
14. The system of claim 11 wherein said cap further comprises a plurality of channels.
15. The system of claim 14 wherein said channels further comprise a plurality of wire holes to receive at least one wire.
16. The system of claim 15 wherein said cap further comprises a hook to secure said at least one wire.
17. The system of claim 15 wherein said at least one wire is made of an absorbable material.
18. The system of claim 11 wherein said cap is made of a transparent material.
19. The system of claim 1 wherein said entrance is located in a stomach.
20. The system of claim 1 wherein said means for attaching further comprises a plurality of retention wires to secure an expandable cap to said entrance.
21. The system of claim 20 wherein said expandable cap is funnel-shaped.
22. The system of claim 20 wherein said plurality of retention wires are made of an absorbable material.
23. The system of claim 1 wherein the diversion of said bodily fluids to said downstream location operates to reduce an amount of bodily fluids that interact with the nutrients.
24. The system of claim 1 wherein the diversion of said bodily fluids to said downstream location operates to alter an amount of nutrients absorbed by the gastrointestinal tract.

25. The system of claim 1 wherein the diversion of said bodily fluids to said downstream location operates to control and stabilize a patient's weight.
26. The system of claim 1 wherein said first end is positioned such that an amount of interaction between the bodily fluids and said nutrients is reduced.
27. The system of claim 26 wherein an absorption time between the bodily fluids and the nutrients is reduced.
28. A device for shortening an effective absorption length of a bowel, comprising:  
a conduit having a first end configured to divert a bodily fluid to a location in a gastrointestinal tract distally from an entrance; and  
a cap coupled to a conduit second end to attach said conduit to said entrance.
29. The device of claim 28 wherein said conduit comprises a flexible tube having a tube length.
30. The device of claim 29 wherein said tube length is adjustable.
31. The device of claim 28 wherein said bodily fluid further comprises a bile secretion
32. The device of claim 28 wherein said bodily fluid further comprises a pancreatic secretion.
33. The device of claim 28 wherein said entrance comprises at least one duct.
34. The device of claim 28 wherein said entrance is the Ampula of Vater.
35. The device of claim 28 wherein said cap is removable from said entrance.
36. The device of claim 28 wherein said cap is permanently attached to said entrance.
37. The device of claim 28 wherein said conduit is delivered into a body through the gastrointestinal tract.

38. The device of claim 28 wherein said cap further comprises a plurality of channels.

39. The device of claim 38 wherein said channels further comprise a plurality of wire holes to receive at least one wire.

40. The device of claim 39 wherein said cap further comprises a hook to secure said at least one wire.

41. The device of claim 39 wherein said at least one wire is made of an absorbable material.

42. The device of claim 28 wherein said conduit and said cap are made of an absorbable material.

43. The device of claim 28 wherein said cap is made of a transparent material.

44. The device of claim 28 wherein said conduit further comprises a plurality of apertures.

45. A method of shortening an effective absorption length of a bowel, comprising:  
inserting a conduit into a patient's mouth, the conduit having a cap at a first end of said conduit;

locating a fluid entrance in the digestive tract of the patient;

positioning a cap over the fluid entrance; and

affixing said cap over said entrance,

wherein a second end of said conduit diverts, by a predetermined distance, fluid entering said fluid entrance to a location in the digestive tract that is downstream from said fluid entrance.

46. The method of claim 45 wherein said inserting further comprises attaching a conduit onto an endoscope.

47. The method of claim 45 wherein said inserting further comprises adjusting a length of said conduit.
48. The method of claim 45 wherein said conduit comprises a flexible tube.
49. The method of claim 45 wherein said entrance comprises at least one duct.
50. The method of claim 45 wherein said entrance is the Ampulla of Vater.
51. The method of claim 45 further comprising removing said cap when an ideal weight is achieved.
52. The method of claim 45 wherein said conduit and said cap are made of an absorbable material.
53. The method of claim 45 wherein said cap is made of a transparent material.
54. The method of claim 45 wherein said conduit further comprises a plurality of apertures.
55. The method of claim 45 wherein said affixing further comprises suctioning said cap to said entrance.
56. The method of claim 55 further comprising securing said cap to said entrance with a wire.
57. The method of claim 45 wherein said affixing further comprises securing said cap to said entrance with at least one staple.
58. The method of claim 45 wherein said affixing further comprises screwing said cap to said entrance.
59. The method of claim 45 wherein said locating further comprises extending said conduit.

60. The method of claim 59 wherein said extending further comprises inserting a saline solution through said cap.
61. The method of claim 59 wherein said extending further comprises inserting air through said cap.
62. The method of claim 45 wherein said affixing further comprises extending said conduit.
63. The method of claim 60 wherein said extending further comprises inserting a saline solution through said cap.
64. The method of claim 60 wherein said extending further comprises inserting air through said cap.
65. An apparatus for shortening an effective absorption length of a bowel, comprising:
- means for inserting a conduit into a patient's mouth, the conduit having a cap at a first end of said conduit;
  - means for locating a fluid entrance in the digestive tract of the patient;
  - means for positioning a cap over the fluid entrance; and
  - means for affixing said cap over said fluid entrance,
- wherein a second end of said conduit diverts, by a predetermined distance, fluid entering said fluid entrance to a location in the digestive tract that is downstream from said fluid entrance.
66. The apparatus of claim 65 wherein said means for inserting further comprises means for attaching a conduit onto an endoscope.

67. The apparatus of claim 65 wherein said means for inserting further comprises means for adjusting a length of said conduit.
68. The apparatus of claim 65 wherein said conduit comprises a flexible tube.
69. The apparatus of claim 65 wherein said entrance comprises at least one duct.
70. The apparatus of claim 65 wherein said entrance is the Ampula of Vater.
71. The apparatus of claim 65 further comprising means for removing said cap when an ideal weight is achieved.
72. The apparatus of claim 65 wherein said conduit and said cap are made of an absorbable material.
73. The apparatus of claim 65 wherein said cap is made of a transparent material.
74. The apparatus of claim 65 wherein said conduit further comprises a plurality of apertures.
75. The apparatus of claim 65 wherein said means for affixing further comprising means for suctioning said cap to said entrance.
76. The apparatus of claim 75 further comprising means for securing said cap to said entrance with a wire.
77. The apparatus of claim 65 wherein said means for affixing further comprises means for securing said cap to said entrance with at least one staple.
78. The apparatus of claim 65 wherein said means for affixing further comprises means for screwing said cap to said entrance.
79. The apparatus of claim 65 wherein said means for locating further comprises means for extending said conduit.

80. The apparatus of claim 79 wherein said means for extending further comprises means for inserting a saline solution through said cap

81. The apparatus of claim 79 wherein said means for extending further comprises means for inserting air through said cap.

82. The apparatus of claim 65 wherein said means for affixing further comprises means for extending said conduit.

83. The apparatus of claim 82 wherein said means for extending further comprises means for inserting a saline solution through said cap.

84. The apparatus of claim 82 wherein said means for extending further comprises means for inserting air through said cap.

85. A device for shortening an effective absorption length of a bowel, comprising:  
a conduit having a first end configured to divert a food fluid to a location in a gastrointestinal tract distally from an entrance; and

an expandable cap coupled to a conduit second end to attach said conduit to said entrance.

86. The device of claim 85 further comprising a plurality of retention wires coupled to said expandable cap to secure said expandable cap to said entrance.

87. The device of claim 86 wherein said plurality of retention wires are made of an absorbable material.

88. The device of claim 85 wherein said entrance is located within the stomach.

89. The device of claim 85 wherein said conduit and said expandable cap are made of an absorbable material.



90. The device of claim 84 wherein said conduit comprises a tube having a tube length.
91. The device of claim 89 wherein said tube length is adjustable.
92. The device of claim 84 wherein said expandable cap is funnel-shaped.
93. A method for shortening an effective absorption length of a bowel, comprising:  
inserting a conduit into a patient's mouth, said conduit having an expandable cap at a first end of the conduit;  
locating a position on a bowel wall of the patient;  
expanding said expandable cap;  
securing said expandable cap to said bowel wall.
94. The method of claim 93 wherein said securing further comprises removably affixing a plurality of retention wires coupled to said expandable cap to said bowel wall.
95. The method of claim 94 wherein said plurality of retention wires are made of an absorbable material.
96. The method of claim 93 wherein said conduit and said expandable cap are made of an absorbable material.
97. The method of claim 93 wherein said inserting further comprises adjusting a tube length of the conduit.
98. The method of claim 93 wherein said expandable cap is funnel-shaped.
99. An apparatus for shortening an effective absorption length of a bowel, comprising:  
means for inserting a conduit into a patient's mouth, said conduit having an expandable cap at a first end of the conduit;

means for locating a position on a bowel wall of the patient;

means for expanding said expandable cap;

means for securing said expandable cap to said bowel wall.

100. The apparatus of claim 99 wherein said means for securing further comprises means for removably affixing a plurality of retention wires coupled to said expandable cap to said bowel wall.

101. The apparatus of claim 100 wherein said plurality of retention wires are made of an absorbable material.

102. The apparatus of claim 99 wherein said conduit and said expandable cap are made of an absorbable material.

103. The apparatus of claim 99 wherein said means for inserting further comprises means for adjusting a tube length of the conduit.

104. The apparatus of claim 99 wherein said expandable cap is funnel-shaped.

105. An apparatus for removably attaching a conduit to a gastrointestinal ("GI") tract, comprising:

a first side, a second side, and a bottom forming a cavity;

a plurality of channels configured to receive a portion of the GI tract; and

means for attaching said portion of the GI tract within said cavity.

106. The apparatus of claim 105 wherein said means for attaching comprises at least one staple.

107. The apparatus of claim 105 wherein said means for attaching comprises at least one suture.

108. The apparatus of claim 105 further comprising a plurality of wire holes within said channels to receive at least one wire.
109. The apparatus of claim 108 further comprising a first extension on said first side and a second extension on said second side.
110. The apparatus of claim 109 further comprising a hook coupled to said first extension to secure said at least one wire.
111. The apparatus of claim 109 further comprising a hook coupled to said second extension to secure said at least one wire.
112. The apparatus of claim 109 wherein said at least one wire is made of an absorbable material.
113. An apparatus for removably attaching a conduit to a gastrointestinal (“GI”) tract, comprising:
- a first side, a second side, and a bottom forming a cavity;
  - a plurality of channels within said cavity configured to receive a portion of the GI tract;
  - a plurality of wire holes within said channels; and
  - at least one wire to be received within said plurality of wire holes.
114. The apparatus of claim 113 further comprising a first extension on said first side and a second extension on said second side.
115. The apparatus of claim 114 further comprising a hook coupled to said first extension to secure said at least one wire.
116. The apparatus of claim 114 further comprising a hook coupled to said second extension to secure said at least one wire.

117. The apparatus of claim 113 wherein said at least one wire is made of an absorbable material.